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ABSTRACT

This module is designed for Teacher Corps interns to develop problem-solving skills through actually engaging in problem-solving activities. Role playing and individual and small-group problem-solving activities are presented to give interns experience in resolving the kinds of problems which they are likely to encounter when they get into the classroom. (The document includes descriptions of the following: preassessment of intern experience, performance-based behavioral objectives, instructional activities, instructional alternatives, materials, and postassessment--through the use of video tape recordings, remediation, and student feedback.) (JA)

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PROBLEM SOLVING

AN INSTRUCTIONAL MODULE

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I. Introduction

Teacher Corps interns need experience during the pre-service training period in problem solving and decision making. Interns generally have had little opportunity in resolving especially educational problems and they are unaccustomed to defining situations using as their frame of reference the position and role of a teacher and facilitator of learning.

This module is designed to develop problem solving skills through actually engaging in problem-solving activities. Role playing, individual and small groups problem-solving activities are designed to give interns experience in resolving the kinds of problems which they are likely to encounter when they get into the classroom in the fall.

II. Pre-Assessment

Interns will be asked to indicate in writing on a card passed out the first day of class their names, addresses, etc., and also their teaching and/or related experience which might be helpful to them in performing effectively as a Teacher Corps intern. The instructor will access the extent and nature of intern experience and will decide if interns can move immediately into problem solving or if some introductory and preliminary instruction is needed before the actual problem solving begins. In making this decision, the instructor will consult the personal files of interns and he will talk to colleagues, interns from previous cycles, target school teachers, and other staff members.

The instructor will also assess intern readiness for immediate problem-solving experiences by observing how interns react while reading

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and discussing two handouts which outline the responsibilities of learners and group members to the direction and nature of learning experiences and educational decision making.

III. Behavioral Objectives

1. The intern will write a description of the force field analysis technique.

Performance Based Objectives:

1. Given a problem situation for which the force field analysis technique would be appropriate, the intern will utilize the technique to solve the problem.
2. Given a set of information, the intern will identify and specify the problem.
3. After a problem has been delineated, the intern will list and defend at least three strategies for solving the problem.
4. Given adequate information, the intern will make a decision and implement it in a live or simulated classroom experience.

IV. Instructional Activities

A. Interns will role play and become actively engaged in problem-solving activities.

B. Intern will verbally and in writing practice defining problems in specific terms. They will be forced into analyzing problems from more than their own perspective and will be expected to make decisions only after analyzing and weighing the merits and limitations of different alternatives and strategies, and the possible consequences of implementing each strategy.

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C. Interns will be expected to demonstrate verbally and in writing, a rational, scientific approach to the resolution of educational problems. They will be encouraged to think before reacting. With practice and training, hopefully the majority of interns will become skilled enough to be able to react spontaneously and in a logical, rational and effective manner in problem-solving situations.

D. Interns will practice identifying problems, developing and implementing strategies, making decisions and being in a position of educational decision maker. Interns will not only practice making but will also practice defending educational decisions from a teacher's vantage point or frame of reference.

E. Interns, using the force field analysis technique, will be able to identify positive and negative factors which effect the probability that strategies employed will in fact resolve specific problems.

F. As a preliminary activity and advanced organizer for problem solving, interns will discuss during regular seminars, handouts which focus on the importance of individual group members taking individual and collective responsibility for resolving problems. Interns will be expected to demonstrate that to a large extent, resolving problems depends upon the elements or parties involved realizing that they in fact exhibit behavior that intentionally and/or unintentionally contributes to the problem.

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IV. Instructional Alternatives

For this module, which is one of the first ones designed for immediate pre-service usage, there will be no real instructional alternatives. The rationale for this includes consideration of the following:

1. The vast majority of interns have had little if any experience making educational decisions.
2. The vast majority of interns need practice resolving problems in an empirical, logical, objective and effective manner.
3. At this point in time, interns do not know each other well and group problem solving is a technique which can be used to build and develop esprit de corps, group identity and cohesiveness.

V. Materials

A. Introductory Materials

Handout - "Freedom to Learn" by Carl Rogers

Handout - "The Teacher and the Class: A Theoretical Framework for Interaction."

B. Core Materials

Problem Solving To Improve Classroom Learning by Richard Schmuck, Mark Chesler, and Ronald Lippitt. Chicago: Science Research Associates, Inc., 1966.

Handouts - "Description of a Problem Solving Effort," Northwest Lab

"Four Guidelines for Writing a Problem Statement," Northwest Lab

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Handouts (continued)

"Problem Analysis Program, (PAP),"

Northwest Lab

"The Force Field Analysis,"

Northwest Lab

"Student Pushes You and You Slap Him,"

Stanton Webster's Discipline in the Classroom

"Elmsville High School," Local Instrument

"Interpersonal Relations," Local Instrument

VI. Post-Assessment

A. In video-taped, simulated, small group class presentations, interns will demonstrate the ability to apply their problem-solving skills, techniques and strategies to the resolution of hypothetical educational problems. The effectiveness of problem solving will be judged adequate if individuals and the group are successful in developing consensus on strategies which have a high probability of success, given the constraints and facts of life which exist and surround the situation. Consideration of individual contributions to group consensus, decision making and problem solving will be made on the basis of:

1. Does the individual play a positive role in the problem-solving effort?
2. Does the individual raise valid points for consideration?
3. Is the person willing to compromise in those areas where compromise is necessary?
4. Has the person demonstrated making a definite effort toward the resolution of the problem?

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Video-taped sessions will involve about 10 interns at a time and they will last approximately 30 minutes. Immediately following each presentation, the session will be played back and evaluated by the interns and the instructor.

VII. Remediation

Interns who do not demonstrate adequate problem-solving skills will be given further individual and/or group problem-solving experiences which will be evaluated by the intern(s) and instructor together determining how well the intern is able to perform on the four evaluation criteria outlined in the post-assessment section of this module.

VIII. Student Feedback

At the conclusion of this module, interns will be asked during a regular intern seminar the following questions:

1. How can we best judge whether or not problem-solving strategies and activities are going to be or have been successful?
2. What distinguishes a profitable problem-solving experience from a non-profitable one?
3. Have the experiences in problem solving which you have been involved in during this module been profitable?
4. What changes would you like made in this module?
5. Would you ever use in your instruction the activities utilized in this module? Why?

During this discussion, the instructor will note intern response and will be careful to solicit responses from all interns.

INSTRUCTIONAL ALTERNATIVE

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Problem Solving Module

Prerequisite - A score of + on the Problem Statement paper or a conference with the instructor.

Alternative - Taking your same problem or a different one, and using the force field analysis technique, develop and defend in writing one primary and one secondary strategy for resolving your problem. In defending your strategies, be sure to include a discussion of:

1. What was or will be done to move toward the desired goal for improvement? Why?
2. How did or how do you think the problem will work out? Why?

For help and suggestions on how to develop your instructional alternative, refer to your handouts or consult with the instructor.

Additional Information - Depending on what group you are in, this alternative is due on either August 9th or 10th.

Electing the alternative excuses one from attending three class meetings.

The alternative will be evaluated by the instructor using the criteria presented above in outlining the alternative.

The alternative evaluation mark carries twice the weight of your original Problem Statement.